

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-26 (Canceled) without prejudice or disclaimer.

27. (New) An identification system comprising
a reader including a transmitter for transmitting a rf continuous wave reader
signal at a pre-selected frequency; and
a plurality of transponders, each transponder including a receiver for receiving
the reader signal and a transmitter for generating a transponder signal,
whereby upon recognising a transponder signal from a said transponder the
reader immediately issues a mute instruction, muting all other active transponders and
passing control to the said transponder, without the need for a specifically timed
acknowledgement to the said controlling transponder, wherein the mute instruction
comprises a modulation of the reader signal whilst the reader signal is maintained at the
said pre-selected frequency.

28. (New) An identification system as claimed in claim 27, characterized in that
the reader issues an acceptance instruction after the controlling transponder signal has
been successfully received by the reader, the acceptance instruction being a
modification of the reader signal.

29. (New) An identification system as claimed in claim 28, wherein the mute instruction is an interruption in the reader signal and the acceptance instruction is a longer interruption in the reader signal.

30. (New) An identification system as claimed in claim 28, wherein the mute instruction is a single pulse in the reader signal and the acceptance instruction is a double pulse in the reader signal.

31. (New) An identification system as claimed in claim 27, wherein the modulation comprises a total interruption of the reader signal; or the modulation comprises a partial interruption of the reader signal; and/or the instruction is signal transmitted independently from the reader signal.

32. (New) An identification system as claimed in claim 27, characterized in that the transponder includes a random wait timer which triggers the transmission of the transponder signal after a random wait cycle has been completed and, if a transponder receives a mute instruction before it has begun transmitting a transponder signal, the random wait cycle of said transponder is halted and/or the random wait cycle of the said transponder is restarted by an acceptance instruction issued by the reader.

33. (New) A method of identifying a plurality of transponders comprising :
transmitting a reader signal from a reader, the reader signal comprising a rf continuous wave signal at a pre-selected frequency,

receiving the reader signal, in each transponder; and
recognizing in the reader a transponder signal transmitted from a transponder
and immediately issuing a mute instruction from the reader, muting all other active
transponders and passing control to the said transponder, without the need for a
specifically timed acknowledgement to the said controlling transponder, wherein the
mute instruction comprises a modulation of the reader signal whilst the reader signal is
maintained at the said pre-selected frequency.

34. (New) A method as claimed in claim 33, characterized by issuing an
acceptance instruction from the reader after the controlling transponder signal has been
successfully received by the reader, the acceptance instruction being a modification of
the reader signal.

35. (New) A method as claimed in claim 34, wherein the mute instruction is an
interruption in the reader signal and the acceptance instruction is a longer interruption in
the reader signal.

36. (New) A method as claimed in claim 34, wherein the mute instruction is a
single pulse in the reader signal and the acceptance instruction is a double pulse in the
reader signal.

37. (New) A method as claimed in claim 35, wherein the modulation comprises
a total interruption of the reader signal; or the modulation comprises a partial

interruption of the reader signal; and/or the instruction is signal transmitted independently from the reader signal.

38. (New) A method as claimed in claim 33, wherein the transponder includes a random wait timer which triggers the transmission of the transponder signal after a random wait cycle has been completed and, if a transponder receives a mute instruction before it has begun transmitting a transponder signal, the random wait cycle of said transponder is halted and/or the random wait cycle of the said transponder is restarted by an acceptance instruction issued by the reader.

39. (New) A transponder comprising:
receiver means for receiving a reader signal at a pre-selected frequency,
transmission means for transmitting a transponder signal containing data which identifies the transponder, whereby in a set of transponders, two or more transponders may transmit their transponder response signals in response to receiving the reader signal; and

control means whereby on recognizing a mute instruction in the reader signal all other active transponders in the set but one are muted and control is passed to said one transponder, without the need for a specifically timed acknowledgement to the said controlling transponder, wherein the mute instruction comprises a modulation of the reader signal whilst the reader signal is maintained at the said pre-selected frequency.

40. (New) A transponder as claimed in claim 39, wherein the control means recognises an acceptance instruction from the reader after the controlling transponder signal has been successfully received by the reader, the acceptance instruction being a modification of the reader signal.

41. (New) A transponder as claimed in claim 40, wherein the mute instruction is an interruption in the reader signal and the acceptance instruction is a longer interruption in the reader signal.

42. (New) A transponder as claimed in claim 40, wherein the mute instruction is a single pulse in the reader signal and the acceptance instruction is a double pulse in the reader signal.

43. (New) A transponder as claimed in claim 39, wherein the modulation comprises a total interruption of the reader signal; or the modulation comprises a partial interruption of the reader signal; and/or the instruction is signal transmitted independently from the reader signal.

44. (New) A transponder as claimed in claim 39, wherein the transponder includes a random wait timer which triggers the transmission of the transponder signal after a random wait cycle has been completed and, if a transponder receives a mute instruction before it has begun transmitting a transponder signal, the random wait cycle

of said transponder is halted and/or the random wait cycle of the said transponder is restarted by an acceptance instruction issued by the reader.

45. (New) An integrated circuit for use in a transponder, comprising:
receiver means for receiving a reader signal at a pre-selected frequency,
transmission means for transmitting a transponder signal containing data which identifies the transponder, whereby in a set of transponders, two or more transponders may transmit their transponder response signals in response to receiving the reader signal, and

control means whereby on recognizing a mute instruction in the reader signal all other active transponders in the set but one are muted and control is passed to said one transponder, without the need for a specifically timed acknowledgement to the said controlling transponder,

wherein the mute instruction comprises a modulation of the reader signal whilst the reader signal is maintained at the said pre-selected frequency.

46. (New) An integrated circuit as claimed in claim 45, wherein the control means recognizes an acceptance instruction from the reader after the controlling transponder signal has been successfully received by the reader.

47. (New) An integrated circuit as claimed in claim 46, wherein the mute instruction is an interruption in the reader signal and the acceptance instruction is a longer interruption in the reader signal.

48. (New) An integrated circuit as claimed in claim 46, wherein the mute instruction is a single pulse in the reader signal and the acceptance instruction is a double pulse in the reader signal.

49. (New) An integrated circuit as claimed in claim 45, wherein the modulation comprises a total interruption of the reader signal, or the modulation comprises a partial interruption of the reader signal; and/or the instruction is signal transmitted independently from the reader signal.

50. (New) An integrated circuit as claimed in claim 45, wherein the integrated circuit includes a random wait timer which triggers the transmission of the transponder signal after a random wait cycle has been completed and, if a transponder receives a mute instruction before it has begun transmitting a transponder signal, the random wait cycle of said transponder is halted and/or the random wait cycle of the said transponder is restarted by an acceptance instruction issued by the reader.